



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,698	11/25/2003	Zachariah Stockwell	50103-543	3035
49745 7590 10/27/2009 SEAGATE TECHNOLOGY LLC c/o MCDERMOTT WILL & EMERY LLP 600 13TH STREET, NW WASHINGTON, DC 20005-3096				
EXAMINER				
ZARE, SCOTT A				
ART UNIT		PAPER NUMBER		
3687				
MAIL DATE		DELIVERY MODE		
10/27/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/720,698

Applicant(s)

STOCKWELL ET AL.

Examiner

SCOTT A. ZARE

Art Unit

3687

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

A non-final rejection was mailed 12/23/2008 in which claims 1-20 were rejected. Applicant has responded with amendments to the claims and remarks received 06/23/2009 which are now subject of this Office action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-15, 17 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by *Jenkins et al.* (US 2002/0188499, referred hereinafter as "*Jenkins*", filed October 29, 2001).

In regard to claims 1 and 17, *Jenkins* teaches a computer-implemented method for distributing parts to customer locations in a volume-based fair share mode, comprising the steps:

- using a processor to prioritize requests for parts from inventory (see paragraphs 178-180);

- using a processor to prioritize locations that have need for the parts (see paragraphs 178-180); and
- using a processor to form a shipment plan by iteratively:
 - assigning a defined minimum size allotment of the parts (see paragraph 181 and 189, disclosing “major shipping quantity”) to the location having the current highest priority (paragraph 236); and
 - re-assigning the priorities of the locations until all of the parts from inventory have been assigned or no location needs more of the parts assigned (see paragraph 272, disclosing “recalculat[ing] priority values”).

In regard to claim 2, *Jenkins* teaches a method further comprising defining the minimum size allotment (see paragraph 181 and 189, disclosing “major shipping quantity”).

In regard to claim 3, *Jenkins* teaches a method wherein each location having a need for the parts from inventory has a percentage need for said parts, and the step of forming a shipment plan includes assigning the minimum size allotment to a highest priority location in each iteration and thereafter re-assigning the priorities such that each location having a need is driven to the same percentage need (see paragraph 205).

In regard to claim 4, *Jenkins* discloses all elements of the claimed invention, but fails to explicitly disclose performing a pallet size pass on the shipment plan. (See paragraph 266.)

In regard to claim 5, *Jenkins* discloses a pallet size pass based on a threshold quantity at which multiples of shippers are cut in full pallets. (See paragraph 266.)

In regard to claim 6, *Jenkins* discloses a pallet quantity that is a quantity of parts that constitutes a full pallet. (See paragraph 266.)

In regard to claim 7, *Jenkins* discloses a shipper that passes through the pallet size pass that has a number of parts greater than the threshold quantity and equal to or less than the pallet quantity. (See paragraph 266.)

In regard to claim 8, *Jenkins* discloses a volume based filter pass on the shipment plan. (See paragraph 266.)

In regard to claim 9, *Jenkins* discloses a based filter pass based on a minimum shipment quantity defining a smallest amount of parts for a specific location or part type. (See paragraph 189, disclosing "major ship quantity")

In regard to claim 10, *Jenkins* discloses wherein the volume based filter pass is based on a percentage impact threshold that is a function of a recommended shipper and a target inventory for a specific location or part type (See paragraph 206, disclosing “fair-share allocation”).

In regard to claim 11, *Jenkins* discloses wherein the parts are shipped from a single source (see Claim 19).

In regard to claim 12, *Jenkins* discloses wherein the parts are shipped from multiple sources, and further comprising determining splitting the source of the parts to fulfill the requests for parts from the locations (see paragraph 224).

In regard to claim 13, *Jenkins* discloses wherein the determining includes forming a balanced supply/demand (See entire disclosure).

In regard to claim 14, *Jenkins* discloses wherein the determining further includes geographic/local sales rules in which specified geographic and local sales shipments are prioritized over optimization of shipments (See paragraph 234).

In regard claim 15, *Jenkins* discloses wherein the determining further includes a business rule filtering in which specified business rules are prioritized over optimization of shipments (See paragraph 234).

In regard to claim 20, *Jenkins* teaches a system for determining distribution of goods to customer locations, comprising:

a processor that receives requests for parts to be delivered to customer locations (see paragraphs 57-58 and FIGS 1A-1B); and

means for forming a shipment plan of the goods to the customer locations on a volume-based fair share basis (See paragraph 232).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Jenkins* in view of *Chappel* (US 7,236,940).

In regard to claim 16, *Jenkins* fails to explicitly disclose creating a set of all supply demand scenarios with all possible combinations of fully providing available supply to a demand point in a matrix, and subsequently performing a sum of squares on the matrix, with the highest sum of squares forming a shipment plan.

Chappel teaches a method and system for accessing and planning business operations utilizing rule-based statistical modeling including creating a set of all supply

demand scenarios with all possible combinations of fully providing available supply to a demand point in a matrix, and subsequently performing a sum of squares on the matrix, with the highest sum of squares forming a shipment plan (See column 7 at lines 45-47, via a statistical business model calculating the sum-of-squares).

Therefore, it would have been obvious for a person having ordinary skill in the art at the time the invention was made to modify Jenkins to include old and well know methods of statistical modeling as taught by Chappel in order to calculate a deviation from a mean, the highest deviation representing the highest priority.

Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Jenkins* in view of *Benda et al.* (US 6,937,992, referred hereinafter as "*Benda*").

In regard to claim 18, *Jenkins* fails to explicitly disclose performing lot sizing optimization after the shipment plan is formed.

Benda teaches a transport vehicle capacity maximization logistics system and method including performing lot sizing optimization after the shipment plan is formed (See col. 11 at lines 56-58, via optimization of pallets for each given SKU).

From the disclosure of *Benda*, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system and method for order based planning as taught by *Jenkins* to include optimizing shipments before they are delivered in order to decrease shipping costs.

In regard to claim 19, *Jenkins* fails to explicitly disclose splitting the source of the parts when there are multiple sources of the parts.

Benda teaches a transport vehicle capacity maximization logistics system and method including splitting the source of the parts when there are multiple sources of the parts (See col. 14 at lines 12-14, via merchandise that is shipped from multiple sources being optimized at a cross-dock for shipment to the same distributor).

From the disclosure of *Benda*, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system and method for order-based planning as taught by *Jenkins* to include optimizing shipments before they are delivered in order to decrease shipping costs.

Response to Arguments

Applicant's arguments filed 06/23/2009 have been fully considered but they are not persuasive.

Claim Objections

Claim 1 has been amended to correct the prior noted informality. Consequently, the objection has been withdrawn.

Claim Rejections - 35 USC § 101

Claim 1 has been amended to include the use of a processor to perform the various step. Consequently, the rejection has been withdrawn.

Claim Rejections - 35 USC § 102

The cited reference of *Jenkins* has been traversed by applicant in that it lacks certain elements of applicant's claimed method. In regard to claim 1, applicant specifically argues that "Jenkins fails to show forming a shipping plan by iteratively assigning a defined minimum size allotment of the parts to the customer location having a current highest priority and re-assigning the priorities of the customer locations until all of the parts from inventory have been assigned or no customer location needs more of the parts assigned." See Remarks, pg. 8. In support of this contention, applicant further states "[a]lthough Jenkins discusses recalculating priority values, it is the shipments that are being prioritized, not the priority of the customer locations."

Although applicant's arguments attempt to distinguish the claimed invention from *Jenkins*, applicant only points to a few excerpts cited in the previous rejection and fails to appreciate the *Jenkins* reference in its entirety. The Examiner takes the position that the reference when read as a whole anticipates each and every element of claim 1.

First, it should be noted that "during patent examination, the claims are given the broadest reasonable interpretation consistent with the specification." MPEP §904.01 and §2111, citing *In re Morris*, 127 F3d 1048 (Fed. Cir. 1997). In addition, "limitations appearing in the specification but not recited in the claim should not be read into the claim. See MPEP §2106, citing *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003).

Claim 1 presently reads as follows:

A computer-implemented method for distributing parts to customer locations in a volume-based fair share mode, comprising the steps of:

using a processor to prioritize requests for parts from inventory;
using a processor to prioritize customer locations that have need for the parts to create priorities from the customer locations; and
using the processor to form a shipment plan by iteratively:
 assigning a defined minimum size allotment of the parts to the customer location having a current highest priority; and
 re-assigning the priorities of the customer locations until all of the parts from inventory have been assigned or no customer locations needs more of the parts assigned.

Applicant has not disputed that the cited reference discloses:

using a processor to prioritize requests for parts from inventory; and
using a processor to prioritize customer locations that have need for the parts to create priorities from the customer locations;

Rather, applicant argues that the *Jenkins* fails to disclose:

using the processor to form a shipment plan by iteratively:
 assigning a defined minimum size allotment of the parts to the customer location having a current highest priority; and
 re-assigning the priorities of the customer locations until all of the parts from inventory have been assigned or no customer locations needs more of the parts assigned.

The Examiner cited paragraph 236 of *Jenkins* to disclosing the "assigning step," and paragraph 272 of *Jenkins* to disclose the "re-assigning step." In view of paragraph 236, it is clear that *Jenkins* discloses a method of first "allocating inventory based on location priority" and then "allocating] based on the allocation strategy." Furthermore, paragraph 272 discloses that "every time the automated load builder 310 adds a shipment to the load, it automatically recalculates priority values and resorts recommended shipments by priority." It is presumed that based on paragraph 272's use of the term "recommended shipment," applicant maintains that "although Jenkins discusses recalculating priority values, it is shipments that are being prioritized, not the priority of the customer locations." See Remarks, 06/23/2009, pg. 8. However, a

thorough review of *Jenkins* as a whole reveals precisely how stock is recommended for shipment.

For example, *Jenkins* discloses "[w]hen planning component **210** is run in constrained mode and source stock is limited . . . you can tell the planning component **210** which locations have priority over others when meeting demand. The planning component **210** will meet demand . . . at locations with highest priority first." See paragraph 178. Once supply has been allocated based on location with highest priority, the planning component then allocates based on demand type. See paragraph 179. More specifically, "[w]hen the planning component **210** is running in constrained mode and source stock is limited . . . , you can define the priorities for allocating stock to meet specified categories of demand. To do this, the user first defines allocation strategies by setting the priority for the demand types wherein different demand categories can share the same priority." See paragraph 179. Examples of demand categories include "dependent demand," "adjusted allocated total forecast," "distribution demand," "forecasted customer orders,"¹ etc. See paragraph 179. Paragraph 210 of *Jenkins* discloses a specific example of allocation supply which meets the limitations recited in the disputed claim language. Paragraph 210 specifically discloses the use of an iterative process of allocation demand based on a "fair share allocation" in which it repeatedly "creates the list of unmet demand." Furthermore, in regard to this iterative fair share allocation process, it is clear that allocation is based on major and minor ship quantities, which are defined in *Jenkins* as "increments in recommend shipment quantities," such as a case or package. (See paragraphs 154, 156, and 211)

Lastly, applicant argues that *Jenkins* does not disclose "an iterative process that is performed until all of the partes from inventory have been assigned or no customer location needs more of the parts assigned." However, contrary to applicant's argument, the cited portions of *Jenkins* describe the "constrained mode" of *Jenkins*' operation. When defining "constrained mode," *Jenkins* discloses "[a] recommended shipment is made for every planned arrival within the recommend shipment durations." Consequently, based on this language, the examiner finds that this language meets the claim limitations of applicant's invention which merely requires all available inventory to be assigned.

Consequently, based on the preceding analysis of *Jenkins* in view of the currently presented claim limitations, the examiner finds applicant's arguments in regard to claim 1 unpersuasive. Furthermore, in regard to claims 17 and 20, applicant relies on a similar argument as discussed above in regard to claim 1, which similarly found unpersuasive.

Claim Rejections - 35 USC § 103

The rejections under 35 USC §103 have been traversed. Applicant argues that because *Jenkins* does not anticipate the independent claims, all further limitations found in dependent claims must also be allowable. However, based on the above 35 USC §102 analysis, *Jenkins* has been found to anticipate claims 1-15, 17, and 20. Thus, this argument is not persuasive.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SCOTT A. ZARE whose telephone number is (571)270-3266. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Gart can be reached on (571) 272-3955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew S Gart/
Supervisory Patent Examiner, Art
Unit 3687

Scott A. Zare
Art Unit 3687
October 24, 2009